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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/935,107	08/23/2001	Preston Cutright	EL-8165	9311

7590 12/06/2005

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EXAMINER
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TOOMER, CEPHIA D

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 12/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/935,107

Applicant(s)

CUTRIGHT ET AL.

Examiner

Cephia D. Toomer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3,9,10 and 12-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,9,10 and 12-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 12, 2005 has been entered.
2. This Office action is in response to the amendment filed September 12, 2005 in which claims 1 and 10 were amended.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3, 9, 10 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Derrick (US 3,893,847).

Derrick teaches fuel compositions comprising finely ground minerals or coal dust, water-soluble polymers and water (see abstract; col. 1, lines 3-8; col. 3, lines 7-14).

The polymers include copolymers of sodium acrylate and acrylamides and functionalized starches (polysaccharides resins) (see col. 1, lines 62-68; col. 2, lines 1-

23; Table 2). The coal dust, water and polymer are combined and are compacted (see claims 1-4). Derrick teaches that the particles of his invention are of a size from 20 to 300 microns (see col. 3, lines 20-23). Derrick teaches the limitations of the claims other than the differences that are discussed below.

Derrick fails to teach that the polysaccharide resins have a molecular weight of less than 500,000. However, a prima facie case of obviousness exists where the claimed ranges and the prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. *Titanium Metals Corp of America v. Banner*, 227 USPQ 773 (Fed. Cir. 1985).

With respect to the origin of the coal dust, Derrick's general teaching of coal dust encompasses all coals and to have selected anthracite, in the absence of unexpected results, would have been obvious to the skilled artisan.

Derrick also fails to teach that the fuel composition is prepared by a pug mill. However, it would have been obvious to one of ordinary skill in the art to use such a device because Derrick teaches that the fuel of his invention is prepared by use of a rotating disc pelletizer and a pug mill is a similar device.

5. Applicant's arguments have been considered but are not deemed to be persuasive.

Applicant argues that the agglomerates of Derrick produce different properties than those of the claimed invention because of the way the agglomerates are produced and the resulting physical properties. Applicant argues that the Derrick uses finely

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ground metal and indurates the agglomerates at temperatures as high as 1350 °C.

Applicant argues that Derrick fails to teach that the agglomerates are compacted.

Applicant has not shown that the properties of the agglomerates of Derrick differ from the properties of the composition of the present invention. The arguments of counsel cannot take the place of evidence in the record and are not the kind of factual evidence that is required to rebut a prima facie case of obviousness.

With respect to Applicant's argument that Derrick uses finely ground metal, it is clear that Derrick teaches that the use of the metal is just one of his embodiments. At col. 3, lines 7-10, Derrick teaches that the manufacture of briquettes from "coal dust" is within the scope of his invention. The teaching also shows that the coal dust material is compacted since one cannot form a briquette in the absence of compaction.

Furthermore, Derrick teaches using a pelletizer.

With respect to the heating step, Derrick teaches that pellets made from finely ground iron ore may be indurated by heating the pellets to a temperature of up to 1350 °C. Nowhere is it taught that briquettes formed from coal dust are heated to this temperature.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 571-272-1126. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Cephia D. Toomer  
Primary Examiner  
Art Unit 1714

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